processor may be configured to receive a corresponding user inputted parameter for the plurality of pump parameter inputs in any order.

[0649] FIG. **87** shows an exploded view of the peristaltic pump **50200** of FIG. **86** in accordance with an embodiment of the present disclosure. The pump **50200** includes an upper housing portion **50290** and a lower portion housing **50300**. Additionally or alternatively, the upper portion **50290** and the lower portion **50300** of the housing **50290**, **50300** may be unitarily formed in some specific embodiments. A modular syringe pumping mechanism **51030** may be coupled to the housing **50290**, **50300**. A motor **51010** actuates the modular syringe pumping mechanism **51030**. The motor **51010** may be controlled via a circuit board **51020** that is coupled to the motor **51010** and to various sensors, actuators, the touchscreen **5024**, etc. The pump **50200** also includes cabling **50310** and a battery **50270** disposed behind the touchscreen **50240** (when assembled). FIG. **88** shows a close-up view of the upper housing **50290**, the lower housing **50300**, and the power supply **50320**. Note how the power supply **50320** is thermally coupled to the lower housing portion **50600** via the conductive path **50330**.

[0650] The pump **50200** includes a power supply **50320**. The power supply **50320** is coupled to a conductive path **50330** to the housing **50300**, **50290** (when assembled). The conductive path **50330** may be a piece of metal and may be unitarily formed with the housing **50300** (or **50290**). The power supply **50320** may use the housing **50290**, **50300** as a heat sink. The power supply **50320** may use any surface of the housing **50290**, **50300** so that it is thermally coupled thereto and/or may be thermally coupled to the housing **50290**, **50300** via the thermally conductive path **50330**.

[0651] FIG. **89**A shows a front view of the display of the pump **50200** and FIG. **89**B shows a back view of the display of the pump **50200** in accordance with an embodiment of the present disclosure. On the back of the touchscreen **50240** (seen easily in FIG. **89**B) a near-field antenna **50340** is disposed. FIG. **90** shows the sensor portion **51050** of the touchscreen with the near-filed antenna **50340** disposed adjacent to the backside of the sensor portion **51050** of the touchscreen **50240** (see FIGS. **89**A-**89**B). A frame **50350** is shown that forms a loop of metal with a gap **51040** having a dielectric **50360** disposed within the gap **51040**. The frame **50350** may be a frame of the sensor **51050** and/or the touchscreen **50240**. The antenna **50340** may operate at 13.56 Megahertz and/or may be an NFC antenna. The metal frame **50350** in conjunction with the gap **51040** and the dielectric **50260** disposed within the gap may form a split-ring resonator. The metal frame **50350** forms an inductive element of the split-ring resonator, and the gap **50140** with the dielectric **50360** disposed therein form a capacitive element of the split-ring resonator.

[0652] FIG. **7000** shows a chart diagram illustrating the use of the sensors of the pump of FIG. **86** when one or more of the sensors are unavailable in accordance with an embodiment of the present disclosure. FIG. **91** shows sensors **7001**, **7002**, and **7003**. The rotary position sensor **7003** may be the rotary sensor **1202** of FIGS. **59**J and **60** (e.g., an encoder). The motor hall sensors **7001** may be the Hall Sensors **3436** on the motor **1200** of FIG. **59**J and **60**. The linear plunger position sensor **7002** may be the linear sensor **3950** of FIG. **59**B (to measure the position of the sliding block **800**) such as the linear position sensor **1100** as shown in FIG. **57**A.

[0653] FIG. **91** may be implemented as a method of using feedback sensors of a syringe pump **50206**. The RTP **3500** of FIG. **59**J may receive signals from the sensors **7001**, **7002**, **7003**.

[0654] The RTP **3500** may cross-check the position of the sliding bock assembly **800** using all three sensors **7001**, **7002**, and **7003** relative to each other. The RTP **3500** will cross check the rotary position sensor **7003** with the motor hall sensors **7001**, and if they are out of agreement by a predetermined amount, the RTP **3500** will compare them to the linear plunger position sensor **7002** to determine the operating one of the sensors **7001** and **7003**. Thereafter, the RTP **3500** will use the operating one of the sensors **7001** and **7003**. If the rotary position sensor **7003** is unavailable, the RTP **3500** will use the motor hall sensors **7001**. The RTP **3500** also cross checks the rotary position sensor **5042** with the motor hall sensors **5043**.

[0655] If it is determined that both of the motor hall sensors **7001** and the rotary position sensor **7003** are inoperative, the RTP **3500** will use only the linear plunger position sensor **7002**.

[0656] FIG. **92** shows a side view of a syringe pump **7004** having a retaining finger **7005** to retain a syringe and FIG. **93** shows a close-up view of the syringe pump **7004** of FIG. **92** in accordance with an embodiment of the present disclosure. The end of the syringe **7010** may be retained by pivotal jaw members **7006**, and **7007**. The pivotal jaw members **7006** and **7007** may include bends as shown. The knob **7008** may be operatively coupled to the pivotal jaw members **7006** and **7007** to cause them to pivot. The knob **7008** may be spring biased to rotate the knob **7008** to cause the pivotal jaw members **7006** and **7007** to rotate toward each other or to rotate away from each other.

[0657] FIG. **94** shows a circuit **8000** for storing data within an RFID tag **8008** associated with an syringe pump (e.g., the syringe pump **500** of FIG. **29**, the syringe pump **50200** of FIG. **86**, or any other syringe pump) in accordance with an embodiment of the present disclosure. The RFID tag **8009** of FIG. **94** may be the RFID tag **3670** of FIG. **95**E. The antenna **8001** of FIG. **94** may be the antenna **3955** of FIG. **59**E.

[0658] The antenna **8001** is coupled to an RFID tag **8008** such that an RFID reader (i.e., RFID interrogator) can communicate with the RFID tag **8008**. The circuit **8000** may be placed on a 1×1 PCB inch board with a solid-metal ground plane of the back side.

[0659] An inner loop **8002** with a capacitor **8003** may form a split-ring resonator to enhance the read range capability of the circuit **8000**. The RFID tag **8008** may be coupled to the antenna **8001** via an impedance matching network **8004**, **8005**, **8006**, **8007**. The circuit **8000** may be configured for use with a **900** Megahertz RFID reader.

[0660] A reader chip **8009** may interface with the RFID tag **8008** to write data (e.g., log data) thereto. The reader chip **8009** may communicate with the RFID tag **8008** using I2C, a CAN bus, or other communications link. Alternatively, **8009** may be an electrical connector, in some embodiments.

[0661] FIG. **95** shows an equivalent circuit **8010** for impedance as seen from the RFID tag **8008** of FIG. **94** in accordance with an embodiment of the present disclosure. A loop **8011** shows the antenna **8001** of FIG. **94**. The inductor **8012** shows the inductor **8004** of FIG. **94**. The resistors **8013** and **8014** are schematic representations of the resistors **8006** and **8005**, respectively. The capacitor **8015** shows the capacitor **8007** of FIG. **94**. The circuit elements **8012**-**8015**